

CLAIMS

1. An integrated thermostatic valve attached to its own housing comprising a hollow, tubular body (1) projecting from a flange (2) with holes (3) used to accept screws for fixing to an engine housing and having a central opening (4) that defines the mouth of a chamber (5) molded to the cavity of the tubular body (1), and having on two diametrically opposed sides, two lengthwise projections (6), which have a groove (7) next to the chamber mouth and another groove (8) near the opening of the body (1) and having fitted into the grooves (8) the ends of a very open, "V" shaped curved metal sheet, on the apex of which is a protuberance in the shape of an upside down cup (10); and having fitted into the grooves (7) the ends of another metal sheet (1), which has a raised central sector with a hole with a turned edge; and having a sheet metal disk (12) with a central hole with a turned edge that is fitted by its rim to the edge of the mouth (4) of the chamber (5); the thermostatic valve integrated into its own housing with a working element or temperature sensor (13), fixed between the central hole in the disk (12) and projecting beyond the housing where, on its end, a washer (14) is fixed for supporting the sheet metal disk with its turned edge (15) that has a central hole where the terminal of the working element of the thermostatic valve is fixed and moves, this disk (15) being subject to the action of a conical spring (16), supported on its other side by a ridge in the body of the temperature sensor formed by a difference in diameters; and an extension of the thermostatic valve projecting into the interior of the chamber (5) and having a centralizing pin fitted to the upside down cup-shaped projection (10); and having near the top of the thermostatic valve a slot that runs all the way around it, and in which a ring (18) is attached, underneath which a "U" shaped stamped metal sheet is fixed (19), which supports a conical spring (20), which on the other side comes up under

the stamped metal sheet (9); and having, between the upper (9) and lower (1) stamped metal sheets, a helical pressure spring (21); and having on the edge of the chamber mouth a circular groove (22) where the sealing ring is fitted.